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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,760	02/06/2002	Yoichi Iihoshi	381AS/49702DV	8415

7590 06/12/2003  
CROWELL & MORING LLP  
Intellectual Property Group  
P.O. Box 14300  
Washington, DC 20044-4300

EXAMINER

NGUYEN, TU MINH

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 06/12/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**Application No.  
**10/066,760**Applicant(s)  
**Iihoshi et al.**Examiner  
**Tu M. Nguyen**Art Unit  
**3748**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED May 27, 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**THE PERIOD FOR REPLY [check only a) or b)]**

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on May 27, 2003. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see NOTE below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

**NOTE:** \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_
- Claim(s) objected to: 8 and 9
- Claim(s) rejected: 8
- Claim(s) withdrawn from consideration: \_\_\_\_\_
8. ☒ The proposed drawing correction filed on Dec 10, 2002 is a) ☒ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☒ Other: see ATTACHMENT

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### **ATTACHMENT**

1. An Applicant's Amendment after final rejection filed on May 27, 2003 has been entered. Claims 1-7, 10, and 11 have been canceled. Claims 8 and 9 have been amended and are pending in the application.

#### ***Claim Objections***

2. Claims 8 and 9 are objected to because of the following informalities:

- Claim 8, lines 7-9 of the claim, the limitation on these lines should read --a catalytic converter temperature measuring means for measuring a temperature of the catalytic converter for making a period of auxiliary injection longer when the temperature of the catalytic converter is lower than a predetermined value--.

- Claim 9, lines 9 and 10 of the claim, "the predetermined value" should read --a predetermined value--.

Appropriate correction is required.

#### ***Allowable Subject Matter***

3. Claim 9 would be allowable if amended to overcome claim objection outlined above.

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***Response to Arguments***

4. Applicant's arguments with respect to the reference of Kaneko et al. applied in the previous Office Action have been fully considered but they are not persuasive.

In response to applicant's argument that Kaneko et al. fail to disclose or suggest making a period of auxiliary injection longer when the temperature of the catalytic converter is lower than a predetermined value (page 5 of Applicant's Amendment), the examiner respectfully disagrees. As indicated at step C90 in Figure 12, Figure 17(B), lines 9-36 of column 19, and lines 13-21 of column 20, if a temperature ( $\theta_{c.c.}$ ) of the catalytic converter (9) is less than a predetermined value ( $\theta_o$ ) (step C20 with YES answer), the controller (23) performs an expansion stroke fuel injection with a longer duration ( $t_{PLUS}$ ) (because K2 is longer) if the temperature of the catalytic converter is lower.

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*Communication*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (703) 308-2833.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (703) 308-2623. The fax phone number for this group is (703) 872-9302. For After Final communication, the fax phone number is (703) 872-9303.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

*Tu M. Nguyen*

TMN

Tu M. Nguyen

June 10, 2003

Patent Examiner

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*Thomas Denion*

THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700